



IES INDOOR REPORT
PHOTOMETRIC FILENAME : EGW-2-LED-10L-CA-S-50-80.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 3649
[TESTLAB] TUV SUD America
[TESTDATE] 1/16/2019 1:57:47 PM
[ISSUEDATE] 03/11/21
[MANUFAC] LSI INDUSTRIES, INC.
[LUMCAT] EGW-2-LED-10L-CA-S-50-80
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED
[OTHER] SCALED FROM ORIGINAL TEST DATA
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Indoor
[SEARCH_COLORTEMP] 5000

CHARACTERISTICS

| | |
|---------------------------------|---------------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 10482 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 150 |
| Total Luminaire Watts | 70 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 0.88 |
| Spacing Criterion (90-270) | 1.34 |
| Spacing Criterion (Diagonal) | 1.26 |
| Basic Luminous Shape | Rectangular w/Sides |
| Luminous Length (0-180) | 2.00 ft |
| Luminous Width (90-270) | 0.50 ft |
| Luminous Height | 0.33 ft |



LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 28813 | 20457 | 28609 |
| 55 | 25977 | 17367 | 22774 |
| 65 | 20719 | 12799 | 15320 |
| 75 | 19860 | 9007 | 6068 |
| 85 | 14451 | 5923 | 1547 |

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CANDELA TABULATION

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> | <u>112.5</u> | <u>135.0</u> | <u>157.5</u> | <u>180.0</u> | <u>202.5</u> |
|--------------|------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| 0.0 | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 |
| 2.5 | 3632 | 3422 | 3581 | 4034 | 4437 | 3719 | 3247 | 3177 | 3342 | 3177 |
| 5.0 | 3329 | 3258 | 2858 | 3094 | 4399 | 2895 | 2921 | 3113 | 3209 | 3113 |
| 7.5 | 3584 | 3280 | 3185 | 2642 | 4374 | 2750 | 2890 | 3488 | 3989 | 3488 |
| 10.0 | 4044 | 4146 | 3142 | 2722 | 4333 | 2936 | 3282 | 4391 | 4332 | 4391 |
| 12.5 | 3615 | 3730 | 3716 | 3057 | 4302 | 2815 | 4355 | 3436 | 2948 | 3436 |
| 15.0 | 2978 | 3004 | 3958 | 3183 | 4244 | 2603 | 3946 | 2528 | 2507 | 2528 |
| 17.5 | 3354 | 2808 | 3066 | 2927 | 4192 | 2655 | 2522 | 2719 | 3487 | 2719 |
| 20.0 | 3659 | 3709 | 2761 | 2963 | 4126 | 3311 | 2290 | 3639 | 3940 | 3639 |
| 22.5 | 2911 | 3503 | 2735 | 3737 | 4029 | 4448 | 2436 | 3240 | 2494 | 3240 |
| 25.0 | 2385 | 2461 | 3203 | 4241 | 3937 | 4558 | 3334 | 2276 | 2429 | 2276 |
| 27.5 | 2306 | 2318 | 3330 | 3555 | 3839 | 3239 | 3481 | 2364 | 3286 | 2364 |
| 30.0 | 2398 | 2284 | 2728 | 2574 | 3778 | 2225 | 2387 | 3091 | 3347 | 3091 |
| 32.5 | 2739 | 2360 | 2228 | 2174 | 3686 | 1992 | 2079 | 3453 | 2944 | 3453 |
| 35.0 | 2745 | 2603 | 2140 | 2311 | 3601 | 1887 | 2346 | 2792 | 3000 | 2792 |
| 37.5 | 2654 | 2628 | 2055 | 2426 | 3489 | 1908 | 2855 | 2619 | 2554 | 2619 |
| 40.0 | 2447 | 2580 | 2064 | 2565 | 3370 | 2599 | 3144 | 2590 | 2527 | 2590 |
| 42.5 | 2155 | 2291 | 2228 | 2939 | 3262 | 2885 | 2647 | 2251 | 2536 | 2251 |
| 45.0 | 2210 | 2068 | 2137 | 2514 | 3134 | 2175 | 2312 | 2272 | 2369 | 2272 |
| 47.5 | 2275 | 2128 | 2154 | 1798 | 2961 | 1935 | 2097 | 2237 | 2132 | 2237 |
| 50.0 | 2077 | 2107 | 2065 | 1600 | 2763 | 1923 | 1791 | 2182 | 1758 | 2182 |
| 52.5 | 1679 | 1930 | 1821 | 1579 | 2565 | 1910 | 1733 | 1689 | 1934 | 1689 |
| 55.0 | 1715 | 1585 | 1705 | 1501 | 2370 | 1888 | 1656 | 1594 | 1717 | 1594 |
| 57.5 | 1586 | 1582 | 1590 | 1419 | 2204 | 1802 | 1615 | 1629 | 1604 | 1629 |
| 60.0 | 1394 | 1509 | 1515 | 1343 | 1989 | 1518 | 1401 | 1293 | 1595 | 1293 |
| 62.5 | 1434 | 1335 | 1300 | 1217 | 1733 | 1243 | 1139 | 1284 | 1297 | 1284 |
| 65.0 | 1105 | 1332 | 1138 | 1051 | 1462 | 1067 | 1112 | 1270 | 1490 | 1270 |
| 67.5 | 1077 | 1100 | 1082 | 936 | 1202 | 907 | 1051 | 1074 | 1180 | 1074 |
| 70.0 | 1001 | 992 | 969 | 853 | 940 | 743 | 850 | 1154 | 1051 | 1154 |
| 72.5 | 788 | 969 | 818 | 734 | 704 | 581 | 770 | 930 | 1065 | 930 |
| 75.0 | 775 | 772 | 693 | 601 | 509 | 468 | 717 | 839 | 996 | 839 |
| 77.5 | 859 | 778 | 598 | 494 | 351 | 396 | 702 | 964 | 984 | 964 |
| 80.0 | 645 | 727 | 600 | 402 | 235 | 329 | 635 | 697 | 697 | 697 |
| 82.5 | 409 | 475 | 538 | 314 | 159 | 283 | 447 | 488 | 536 | 488 |
| 85.0 | 340 | 323 | 371 | 259 | 108 | 228 | 302 | 370 | 411 | 370 |
| 87.5 | 275 | 261 | 243 | 194 | 73 | 143 | 241 | 326 | 369 | 326 |
| 90.0 | 250 | 230 | 177 | 123 | 48 | 114 | 217 | 292 | 333 | 292 |
| 92.5 | 239 | 219 | 145 | 94 | 42 | 105 | 215 | 274 | 309 | 274 |
| 95.0 | 240 | 217 | 138 | 89 | 45 | 98 | 219 | 261 | 280 | 261 |
| 97.5 | 209 | 207 | 139 | 88 | 45 | 88 | 207 | 243 | 244 | 243 |
| 100.0 | 169 | 175 | 134 | 82 | 43 | 76 | 184 | 216 | 226 | 216 |
| 102.5 | 151 | 151 | 125 | 73 | 39 | 61 | 163 | 205 | 226 | 205 |
| 105.0 | 141 | 139 | 117 | 61 | 33 | 43 | 137 | 191 | 217 | 191 |
| 107.5 | 132 | 127 | 107 | 44 | 28 | 27 | 113 | 169 | 195 | 169 |
| 110.0 | 120 | 113 | 93 | 27 | 23 | 15 | 94 | 148 | 173 | 148 |
| 112.5 | 106 | 100 | 78 | 14 | 18 | 7 | 76 | 131 | 153 | 131 |
| 115.0 | 95 | 88 | 61 | 7 | 14 | 4 | 54 | 116 | 139 | 116 |
| 117.5 | 86 | 79 | 44 | 4 | 10 | 2 | 34 | 100 | 127 | 100 |
| 120.0 | 79 | 70 | 31 | 3 | 6 | 1 | 24 | 78 | 109 | 78 |
| 122.5 | 66 | 55 | 21 | 1 | 3 | 0 | 17 | 54 | 82 | 54 |
| 125.0 | 50 | 40 | 14 | 1 | 1 | 0 | 7 | 42 | 60 | 42 |
| 127.5 | 37 | 29 | 5 | 0 | 0 | 0 | 0 | 31 | 47 | 31 |
| 130.0 | 27 | 23 | 0 | 0 | 0 | 0 | 0 | 23 | 34 | 23 |
| 132.5 | 21 | 16 | 0 | 0 | 0 | 0 | 0 | 11 | 25 | 11 |

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PHOTOMETRIC FILENAME : EGW-2-LED-10L-CA-S-50-80.IES

CANDELA TABULATION - (Cont.)

| | | | | | | | | | | |
|-------|----|---|---|---|---|---|---|---|----|---|
| 135.0 | 14 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 11 | 1 |
| 137.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 140.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 142.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 145.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 150.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 152.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 155.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 157.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 160.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 162.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 165.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 167.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 170.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 172.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 177.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Vert. Angles | Horizontal Angles | | | | | | |
|-----------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | <u>225.0</u> | <u>247.5</u> | <u>270.0</u> | <u>292.5</u> | <u>315.0</u> | <u>337.5</u> | <u>360.0</u> |
| 0.0 | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 | 4230 |
| 2.5 | 3247 | 3719 | 4437 | 4034 | 3581 | 3422 | 3632 |
| 5.0 | 2921 | 2895 | 4399 | 3094 | 2858 | 3258 | 3329 |
| 7.5 | 2890 | 2750 | 4374 | 2642 | 3185 | 3280 | 3584 |
| 10.0 | 3282 | 2936 | 4333 | 2722 | 3142 | 4146 | 4044 |
| 12.5 | 4355 | 2815 | 4302 | 3057 | 3716 | 3730 | 3615 |
| 15.0 | 3946 | 2603 | 4244 | 3183 | 3958 | 3004 | 2978 |
| 17.5 | 2522 | 2655 | 4192 | 2927 | 3066 | 2808 | 3354 |
| 20.0 | 2290 | 3311 | 4126 | 2963 | 2761 | 3709 | 3659 |
| 22.5 | 2436 | 4448 | 4029 | 3737 | 2735 | 3503 | 2911 |
| 25.0 | 3334 | 4558 | 3937 | 4241 | 3203 | 2461 | 2385 |
| 27.5 | 3481 | 3239 | 3839 | 3555 | 3330 | 2318 | 2306 |
| 30.0 | 2387 | 2225 | 3778 | 2574 | 2728 | 2284 | 2398 |
| 32.5 | 2079 | 1992 | 3686 | 2174 | 2228 | 2360 | 2739 |
| 35.0 | 2346 | 1887 | 3601 | 2311 | 2140 | 2603 | 2745 |
| 37.5 | 2855 | 1908 | 3489 | 2426 | 2055 | 2628 | 2654 |
| 40.0 | 3144 | 2599 | 3370 | 2565 | 2064 | 2580 | 2447 |
| 42.5 | 2647 | 2885 | 3262 | 2939 | 2228 | 2291 | 2155 |
| 45.0 | 2312 | 2175 | 3134 | 2514 | 2137 | 2068 | 2210 |
| 47.5 | 2097 | 1935 | 2961 | 1798 | 2154 | 2128 | 2275 |
| 50.0 | 1791 | 1923 | 2763 | 1600 | 2065 | 2107 | 2077 |
| 52.5 | 1733 | 1910 | 2565 | 1579 | 1821 | 1930 | 1679 |
| 55.0 | 1656 | 1888 | 2370 | 1501 | 1705 | 1585 | 1715 |
| 57.5 | 1615 | 1802 | 2204 | 1419 | 1590 | 1582 | 1586 |
| 60.0 | 1401 | 1518 | 1989 | 1343 | 1515 | 1509 | 1394 |
| 62.5 | 1139 | 1243 | 1733 | 1217 | 1300 | 1335 | 1434 |
| 65.0 | 1112 | 1067 | 1462 | 1051 | 1138 | 1332 | 1105 |
| 67.5 | 1051 | 907 | 1202 | 936 | 1082 | 1100 | 1077 |
| 70.0 | 850 | 743 | 940 | 853 | 969 | 992 | 1001 |
| 72.5 | 770 | 581 | 704 | 734 | 818 | 969 | 788 |
| 75.0 | 717 | 468 | 509 | 601 | 693 | 772 | 775 |
| 77.5 | 702 | 396 | 351 | 494 | 598 | 778 | 859 |
| 80.0 | 635 | 329 | 235 | 402 | 600 | 727 | 645 |

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CANDELA TABULATION - (Cont.)

| | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|
| 82.5 | 447 | 283 | 159 | 314 | 538 | 475 | 409 |
| 85.0 | 302 | 228 | 108 | 259 | 371 | 323 | 340 |
| 87.5 | 241 | 143 | 73 | 194 | 243 | 261 | 275 |
| 90.0 | 217 | 114 | 48 | 123 | 177 | 230 | 250 |
| 92.5 | 215 | 105 | 42 | 94 | 145 | 219 | 239 |
| 95.0 | 219 | 98 | 45 | 89 | 138 | 217 | 240 |
| 97.5 | 207 | 88 | 45 | 88 | 139 | 207 | 209 |
| 100.0 | 184 | 76 | 43 | 82 | 134 | 175 | 169 |
| 102.5 | 163 | 61 | 39 | 73 | 125 | 151 | 151 |
| 105.0 | 137 | 43 | 33 | 61 | 117 | 139 | 141 |
| 107.5 | 113 | 27 | 28 | 44 | 107 | 127 | 132 |
| 110.0 | 94 | 15 | 23 | 27 | 93 | 113 | 120 |
| 112.5 | 76 | 7 | 18 | 14 | 78 | 100 | 106 |
| 115.0 | 54 | 4 | 14 | 7 | 61 | 88 | 95 |
| 117.5 | 34 | 2 | 10 | 4 | 44 | 79 | 86 |
| 120.0 | 24 | 1 | 6 | 3 | 31 | 70 | 79 |
| 122.5 | 17 | 0 | 3 | 1 | 21 | 55 | 66 |
| 125.0 | 7 | 0 | 1 | 1 | 14 | 40 | 50 |
| 127.5 | 0 | 0 | 0 | 0 | 5 | 29 | 37 |
| 130.0 | 0 | 0 | 0 | 0 | 0 | 23 | 27 |
| 132.5 | 0 | 0 | 0 | 0 | 0 | 16 | 21 |
| 135.0 | 0 | 0 | 0 | 0 | 0 | 6 | 14 |
| 137.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 140.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 142.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 145.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 150.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 152.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 155.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 157.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 160.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 162.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 165.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 167.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 170.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 172.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 177.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|----------|-------|--------|
| 0-20 | 1266.63 | N.A. | 12.10 |
| 0-30 | 2741.07 | N.A. | 26.20 |
| 0-40 | 4381.82 | N.A. | 41.80 |
| 0-60 | 7802.17 | N.A. | 74.40 |
| 0-80 | 9756.72 | N.A. | 93.10 |
| 0-90 | 10104.37 | N.A. | 96.40 |
| 10-90 | 9777.2 | N.A. | 93.30 |
| 20-40 | 3115.19 | N.A. | 29.70 |
| 20-50 | 4950.29 | N.A. | 47.20 |
| 40-70 | 4614.86 | N.A. | 44.00 |
| 60-80 | 1954.54 | N.A. | 18.60 |
| 70-80 | 760.04 | N.A. | 7.30 |
| 80-90 | 347.66 | N.A. | 3.30 |
| 90-110 | 296.82 | N.A. | 2.80 |
| 90-120 | 355.33 | N.A. | 3.40 |
| 90-130 | 374.75 | N.A. | 3.60 |
| 90-150 | 377.47 | N.A. | 3.60 |
| 90-180 | 377.47 | N.A. | 3.60 |
| 110-180 | 80.65 | N.A. | 0.80 |
| 0-180 | 10481.84 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|---------|
| 0-10 | 327.18 |
| 10-20 | 939.46 |
| 20-30 | 1474.44 |
| 30-40 | 1640.75 |
| 40-50 | 1835.1 |
| 50-60 | 1585.25 |
| 60-70 | 1194.5 |
| 70-80 | 760.04 |
| 80-90 | 347.66 |
| 90-100 | 178.67 |
| 100-110 | 118.16 |
| 110-120 | 58.51 |
| 120-130 | 19.42 |
| 130-140 | 2.72 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

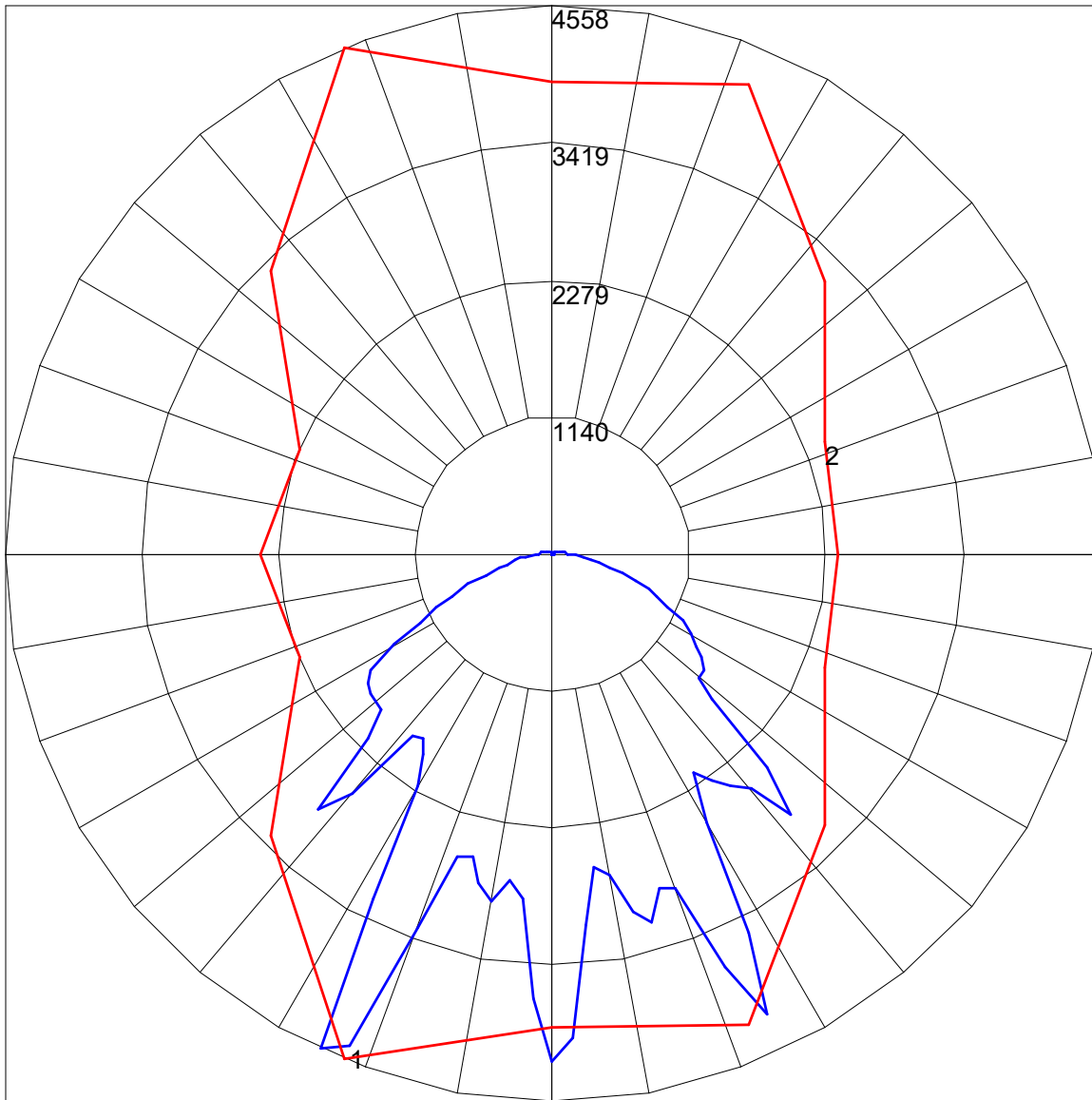
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 96 |
| 1 | 107 | 102 | 98 | 94 | 104 | 100 | 95 | 92 | 95 | 91 | 88 | 90 | 87 | 85 | 86 | 84 | 82 | 79 |
| 2 | 97 | 89 | 82 | 76 | 94 | 87 | 80 | 75 | 83 | 77 | 72 | 79 | 74 | 70 | 75 | 71 | 68 | 66 |
| 3 | 89 | 78 | 70 | 63 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | 69 | 64 | 59 | 66 | 62 | 58 | 55 |
| 4 | 81 | 69 | 60 | 53 | 79 | 67 | 59 | 53 | 64 | 57 | 52 | 62 | 55 | 50 | 59 | 54 | 49 | 47 |
| 5 | 75 | 62 | 53 | 46 | 72 | 60 | 52 | 45 | 58 | 50 | 45 | 55 | 49 | 44 | 53 | 47 | 43 | 41 |
| 6 | 69 | 55 | 46 | 40 | 67 | 54 | 46 | 40 | 52 | 45 | 39 | 50 | 43 | 38 | 48 | 42 | 38 | 36 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 47 | 40 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 31 |
| 8 | 59 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 30 | 40 | 34 | 30 | 28 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 27 | 37 | 31 | 27 | 25 |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 25 | 37 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 25 | 23 |

POLAR GRAPH



Maximum Candela = 4558 Located At Horizontal Angle = 112.5, Vertical Angle = 25
1 - Vertical Plane Through Horizontal Angles (112.5 - 292.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)